

Product datasheet for **RR206197**

Prkg2 (NM_013012) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prkg2 (NM_013012) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prkg2
Synonyms:	cGKII; GDPKII
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RR206197 representing NM_013012
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGAAATGGTTCAGTCAAACCAAGCATTCAAGACACCCAGACGGCCAGTCAGGGAACCTCAGCAATG
AAGCCCTGCGGAGCAAAGTGGCAGAGCTGGAGCGCGAGGTGAAGAGGAAGGATGCAGAATTCAGGAGCG
CGAGTACCACCTGAAGGAGCTTCGGGAGCAGCTAGCTAAGCAGACCGTGGCCATTGCGGAGCTCACCGAG
GAGCTGCAGAGCAAGTGCATCCAGCTGAACAAGCTGCAGGATGTTATCCACGTGCAGGGAGGAAGCCAC
TGCAGGCCCTCCTCCGACAAAGTGCCTCTGGATGTTACCCGCAAGACCTCAGGCTTGGTCTCCCTCCACAG
CAGGAGGGGGCGAAGGCTGGAGTGTCTGCAGAGCCACAAGCCGGACCTATGACCTCAACAAGCCCTCT
GAGTTCCTTTGAGAAAGCGAGGGTCAAGGATTCCAGTGAAGAAAACTTATCACAGACGCCCTGA
ATAAGAACCAGTTTCTGAAGAGACTGGATCCGCAGCAGATCAAAGACATGGTGAATGCATGTACGGGAG
AAACTATCAACAGGGCAGTTACATCGTTAAGCAAGGGGAACCTGGAACACATCTTTGTCTGGCCGAG
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CGATAGAGAGGTTTTCCAGAACATTATGAGGAGAACAGCGCAAGCCAGGGATGAGGAATACAGAACTTC
CTCAGAAGTGTCTCCTGTTGAAGAATTAACCTGAAGCAAACTAACCAAGATTATTGACTGCTTGGAA
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TGAAATGTATCGTACTTTCAAGGACAATAAATACGTATACATGCTTCTGGAGGCTGCTTAGGTGGGA
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TTCCCTCACCTTTACGAAGAGAGCTCAGTGGCCCCATAGATCACAGCTACTTTGACAAGTATCCTCTGA
AAAGGGGTTCTCCGGATGAAATGTCAAGCTGGGATAAGGACTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR206197 representing NM_013012
 Red=Cloning site Green=Tags(s)

MGNQSVKPKHSHKHPDGGQSGNLSNEALRSKVAELEREVKKRDAELQEREYHLKELREQLAKQTVAIAELTE
 ELQSKCIQLNKLQDVIHVQGGSPQLQASPKVPLDVHRKTSGLVSLHSRRGAKAGVSAEPTSRTYDLNKPP
 EFSFEKARVRKDSSEKKLITDALNKNQFLKRLDPQIKDMVECMYGRNYQQGSYIVKQGEFGNHIFVLAE
 GRLEVFQGEKLLSSIIMWTTFFGELAILYNCTRRTASVKAITNVKTWALDREVFQNIIMRRTAQARDEEYRNF
 LRSVSLKLNLPEDKLTKIIDCLEVEYYDKGDYIIREGEEGSTFFILAKGKVKVTQSTEGHDQPQLIKTLQ
 KGEYFGEKALISDDVRSANIAEENDVACLVIDRETFNQTVGTFDELQKYLEGYVATLNRDDEKRHAKRS
 MSSWKLKALSLEMIQLKEKVARFSSTSPFQNLLEIIATLGVGGFGRVELVKVKNENIAFAMKCRKHKHIV
 DTKQQEHVYSEKRILEELCSPFIVKLYRTFKDNKYVYMLLEACLGGELWSILDRGFSDEPTSKFCVACV
 TEAFDYHLRHLGIYRDLKPENLILDADGYLKLVDFGFACKIGSGQKTWTFCTGPEYVAPEVILNKGHDFS
 VDFWSLGIIVYELLTGNPPFSGIDQMMTYNLILKGIKMDFFRKITRRPEDLIRRLCRQNPTERLGNLKN
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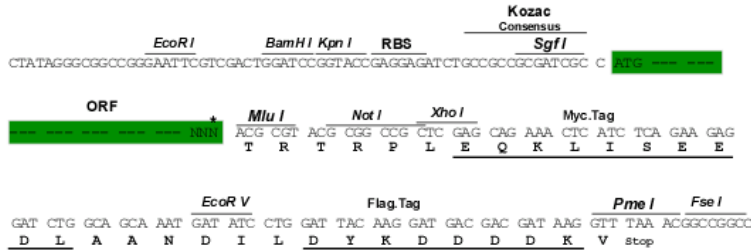
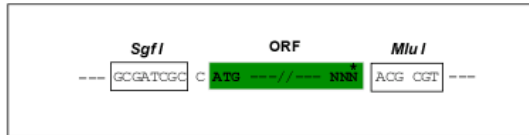
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

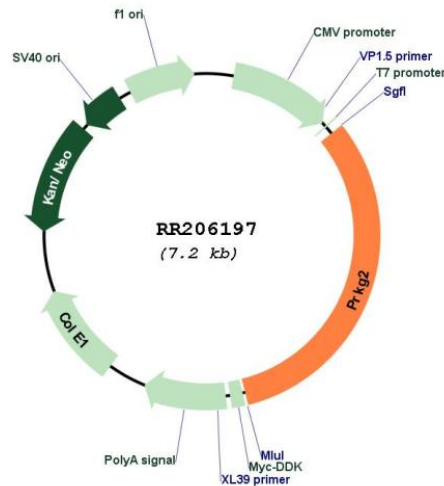
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_013012

ORF Size: 2286 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_013012.1](#), [NP_037144.1](#)

RefSeq Size: 2990 bp

RefSeq ORF: 2289 bp

Locus ID: 25523

UniProt ID: [Q64595](#)
Cytogenetics: 14p22
MW: 87.2 kDa
Gene Summary: may regulate renin release and renal ion transport [RGD, Feb 2006]